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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,497	10/27/2000	Ronald Coleman	CITI0192-US	3524
75127 7590 11/25/2008 KING & SPALDING LLP (CITI CUSTOMER NUMBER) A'TIN: GEORGE T. MARCOU			EXAMINER	
			AKINTOLA, OLABODE	
1700 PENNSYLVANIA AVENUE, NW SUITE 200		ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20006			3691	
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			11/25/2009	DADED

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Application No. Applicant(s) 09/697,497 COLEMAN, RONALD Office Action Summary Examiner Art Unit OLABODE AKINTOLA 3691 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 08 October 2008. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-9 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner, Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some \* c) ☐ None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

SI Other

5) Notice of Informal Patent Application

#### DETAILED ACTION

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordnary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fogel et al. (US 6542905) ("Fogel") in view of Mathews, Jr. et al (US 6526358) ("Mathews") and further in view of Dumais et al (US 6192360) ("Dumais").

Re claims 1, 7: Fogel teaches a method comprising: identifying at least one variable of the a system (col. 4, lines 20-21, col. 5, lines 24-30); determining a first hypothesis about the at least one variable (col. 4, lines 47-50); identifying a change of value in the at least one variable of the system (col. 4, lines 37-43, col. 5, lines 63-65); determining by probabilistic induction at least

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one cause of the change of value in the at least one variable of the system (Abstract, col. 6, line 14 thru col. 7, lines 32).

Fogel does not explicitly teach risk assessment system; providing an initial probability of the first hypothesis about the at least one variable, wherein the initial probability has a range greater than 0.0 and less than 1.0; and evaluating the initial probability of the first hypothesis based on the at least one cause. However, Fogel teaches applicability in financial service industry including risk factors for quality indicator or performance measure (col. 3, lines 14-30; col. 10, lines 31-33). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fogel to include risk assessment system. One would have been motivated to do so in order to identify data integrity issues.

Mathews teaches providing an initial probability of the first hypothesis about the at least one variable, wherein the initial probability has a range greater than 0.0 and less than 1.0 (col. 6, lines 43-49: "initial knowledge (a priori information) as to the probability of a fault occurring  $(P_{ap}(H_i))$ ...); evaluating the initial probability of the first hypothesis based on the at least one cause (col. 6, lines 19-64). Dumais in the same field of art (Bayesian networks) teaches that this initial knowledge represents a prior probability assigned to a given hypothesis i (col. 3, lines 35 - 67). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fogel to include these steps as taught by Matthews and evidenced by Dumais. One would have been motivated to do so in order to determine the statistical accuracy of the hypothesis, thereby enhancing the functionality of the process.

Fogel in view of Matthews in view of Dumais hereinafter referred to as "Modified Fogel" Re claims 2 and 3: Modified Fogel teaches input and output (Fogel: see figure) Art Unit: 3691

Re claim 4: Modified Fogel teaches external data (Fogel: see figure)

Re claim 5: Modified Fogel teaches server (Fogel: see figure)

Re claim 6: Modified Fogel teaches observable information (Fogel: see figure)

Re claims 8: Modified Fogel teaches hypothesizing that the at least one variable has not changed

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(col. 4, lines 47-50)

Re claim 9: Modified Fogel teaches providing a prior probability of the at least one variable and

providing an initial conditional probability of the at least one variable (Dumais; col. 3, lines 35-

67)

#### Response to Arguments

Applicant's arguments filed 10/08/2008 have been fully considered but they are not persuasive.

Applicant argues that Fogel fails to teach "determining by probabilistic induction at least one cause of the change of value in the at least one variable of the risk assessment system, wherein the at least one cause is a plausible source of error" as recited in claim 1. In particular, Applicant argues that Fogel does not require "probabilistic induction". Examiner respectfully disagrees. Examiner notes that according to the specification of the instant application (page 9, line 27 through page 10, line 9), applicant admits that both deterministic and probabilistic models are well known in the art. Furthermore, Fogel at col. 10, lines 5-17 explicitly describes a probabilistic model.

#### Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matsuda et al (US 4860214) teaches an inferences system (see col. 16, lines 35-64).

Ferkinhoff et al (US 6304833) teaches an hypothesis selection for evidential reason system (col. 4, lines 46-67).

Heiman, V. B., (Auditors' assessment of the likelihood of analytical review explanations", University of Michigan, 1988) teaches *evaluating* the *probability* that a *hypothesized cause* is responsible for an analytical review fluctuation (See Abstract (Summary)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLABODE AKINTOLA whose telephone number is (571)272-3629. The examiner can normally be reached on M-F 8:30AM -5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA

/Hani M. Kazimi/ Primary Examiner, Art Unit 3691